```
File 155:MEDLINE(R) 1950-2009/Dec 09
         (c) format only 2009 Dialog
*File 155: No updates were provided Friday or Saturday, 12/11-12.
Please see HELP NEWS 154 for information.
        5:Biosis Previews(R) 1926-2009/Dec W4
         (c) 2009 The Thomson Corporation
 File 972:EMBASE 1947-2010/Jan 04
         (c) 2010 Elsevier B.V.
 File 65:Inside Conferences 1993-2009/Dec 31
         (c) 2009 BLDSC all rts. reserv.
 File 35:Dissertation Abs Online 1861-2009/Nov
         (c) 2009 ProQuest Info&Learning
 File 23:CSA Technology Research Database 1963-2009/Nov
         (c) 2009 CSA.
 File 24:CSA Life Sciences Abstracts 1966-2009/Jan
         (c) 2009 CSA.
       45:EMCare 2009/Dec W4
 File
         (c) 2009 Elsevier B.V.
 File 136:BioEngineering Abstracts 1966-2007/Jan
         (c) 2007 CSA.
*File 136: This file is closed.
 File 95:TEME-Technology & Management 1989-2009/Nov W5
         (c) 2009 FIZ TECHNIK
 File
       98:General Sci Abs 1984-2009/Dec
         (c) 2009 The HW Wilson Co.
 File
         8:Ei Compendex(R) 1884-2009/Dec W3
         (c) 2009 Elsevier Eng. Info. Inc.
 File
         6:NTIS 1964-2009/Jan W2
         (c) 2009 NTIS, Intl Cpyrght All Rights Res
         2:INSPEC 1898-2009/Dec W2
 File
         (c) 2009 The IET
       2: UD200912W2 is the last update for 2009. The next weekly update
is expected the second week of January.
 File 144:Pascal 1973-2009/Dec W3
         (c) 2009 INIST/CNRS
       239026
              (IO OR INTRAOCULAR )()PRESSURE? ? OR IOP OR GLAUCOMA? ? OR
S1
             (OCULAR OR INTRAOCULAR) () HYPERTENSION
limitall/s1
       89377
               MULTIPLE OR MULTI OR MANY OR NUMEROUS OR PLURALITY OR MORE-
             () THAN OR SEVERAL OR NUMBER OR ADDITIONAL OR TWO OR DUAL OR P-
             AIR OR SECOND OR SECONDARY
s3
         5319
              STENT? ? OR CHANNEL? ? OR SHUNT? ?
S4
         1097 STENT? ? OR SHUNT? ?
S5
         7210 IMPLANT? ?
         1315 (OUTFLOW OR DRAIN? OR DISCHARG? OR FLOW) (2N) (PATH? OR TUBE?
             OR TUBULAR OR SHEATH OR SLEEVE? ?)
s7
         914 S2(10N)S3
S8
         53 S7(S)(S5 OR S6)
         154 S2(10N)S4
S9
         175 S8 OR S9
S10
              S10 AND S1
S11
         175
              RD (unique items)
S12
          90
          85 S2(S)S5(S)S6
85 S13 AND S1
S13
S14
          79 S14 NOT S11
S15
         30 RD (unique items)
S16
```

12/7/11 (Item 11 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2009 Dialog. All rights reserved.

16293592 **PMID:** 15629290

Trabecular bypass stents decrease intraocular pressure in cultured human anterior segments.

Bahler Cindy K; Smedley Gregory T; Zhou Jianbo; Johnson Douglas H

Department of Ophthalmology, Mayo Clinic College of Medicine, Rochester, Minnesota 55905, USA. American journal of ophthalmology (United States) Dec 2004, 138 (6) p988-94, ISSN: 0002-

9394--Print **Journal Code:** 0370500

Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH
Main Citation Owner: NLM

Record type: MEDLINE; Completed

PURPOSE: To determine the effect on intraocular pressure (IOP) of bypassing the trabecular meshwork in cultured human anterior segments. DESIGN: Prospective laboratory investigation using normal human eyes obtained at autopsy. METHODS: Anterior segments from 21 eyes were placed in perfusion culture, and trabecular bypass stents were inserted through the trabecular meshwork, with the lumen of the tube opening into Schlemm's canal. Eyes received from one to four stents, placed equidistant apart. In eyes receiving one or two stents, additional stents were later added to a maximum of four per eye. RESULTS: Intraocular pressure was lowered after placement of a single stent, from 21.4 + /-3.8 mm Hg to 12.4 + /-4.2 (P < .001). This corresponded to an 84% increase in facility of outflow. Eyes receiving more than one stent had final IOP of 11.9 +/- 3.7 mm Hg. Nine eyes had sequential addition of stents, and seven of these had a further decrease of IOP (13.6 +/- 4.1 to 10.0 + 4.3; P = .02). Excision of the entire meshwork, between stents, dropped **IOP** to 6.3 + 4.3? mm Hg, indicating some residual meshwork or canal resistance remained even after placement of three stents. CONCLUSIONS: Bypass of the trabecular meshwork lowers IOP in cultured human anterior segments. One stent produced the greatest change in pressure. The sequential addition of more stents further lowered pressure in seven of nine eyes. This technique holds promise as a new clinical surgery for glaucoma.

12/7/27 (Item 27 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2009 Dialog. All rights reserved.

13712783 **PMID:** 10764852

Shunt revision versus additional tube shunt implantation after failed tube shunt surgery in refractory glaucoma.

Shah A A; WuDunn D; Cantor L B

Glaucoma Service, Department of Ophthalmology, Indiana University School of Medicine,

Indianapolis, Indiana 46202, USA.

American journal of ophthalmology (UNITED STATES) Apr 2000, 129 (4) p455-60, ISSN:

0002-9394--Print **Journal Code:** 0370500

Publishing Model Print

Document type: Comparative Study; Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH
Main Citation Owner: NLM

Record type: MEDLINE; Completed

PURPOSE: To compare tube shunt revision with additional tube shunt after failed tube shunt surgery. METHODS: We identified 281 patients who underwent a primary tube shunt procedure from 1985 to 1998 at Indiana University and reviewed 33 eyes of 33 patients that had failed and required further surgery. Shunt revision was performed in 12, whereas an additional shunt was placed in 21 eyes. Intraocular pressure, antiglaucoma medications, visual acuity, and complications were noted. Success was defined as at least a 25% reduction in **intraocular pressure** that was deemed clinically adequate. Qualified success was defined as a 25% intraocular pressure reduction but with additional medications or a significant reduction in medications with stable intraocular pressure for preoperative intraocular pressure less than 21 mm Hg. RESULTS: Preoperative intraocular pressures (mean +/- 95% confidence interval) for the revision and additional tube groups were 28.8 +/-5.8 mm Hg and 29.8 +/-2.7 mm Hg (P = .73), with an average follow-up period of 25.2 months (range, 3 to 108 months) and 34.8 months (range, 6 to 84 months), respectively. Final mean intraocular pressure was 25.3 +/- 6.7 mm Hg for the revision group and 17.7 +/- 3.4 mm Hg for the additional tube group (P = .037). Forty-two percent in the revision group versus 62% in the additional tube group achieved at least a qualified success (P = .30, Fisher exact test). Corneal edema was a common complication, especially in the additional tube group. Limitations of this study include the small sample sizes and the uneven distribution of neovascular glaucoma between the two groups (six of 12 in the revision group vs two of 21 in the additional tube group; P = .015, Fisher exact test). CONCLUSIONS: Our series showed that after failed tube shunt surgery, an additional tube shunt offers better intraocular pressure control than revision by excision of an encapsulated bleb.

12/7/28 (Item 28 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2009 Dialog. All rights reserved.

13654999 **PMID:** 10690831

Outcomes of sequential tube shunts in complicated glaucoma.

Burgoyne J K; WuDunn D; Lakhani V; Cantor L B

Department of Ophthalmology, Indiana University, Indianapolis 46202, USA.

Ophthalmology (UNITED STATES) Feb 2000, 107 (2) p309-14, ISSN: 0161-6420--Print

Journal Code: 7802443 Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

OBJECTIVE: To evaluate **intraocular pressure** (**IOP**) control, change in visual acuity, and complications in eyes that have undergone a **second glaucoma** tube **shunt** procedure. DESIGN: Retrospective, noncomparative case series. PARTICIPANTS: Twenty- **two** eyes of 22 patients that have undergone sequential tube **implants** for management of **glaucoma**. METHODS: Parameters analyzed included **IOP**, visual acuity, and **number** of hypotensive agent before each **shunt** procedure and at last follow-up visit. The overall **IOP** lowering effect attributable to each tube **shunt** was calculated. Any ocular complications after the **second** tube **shunt** were recorded. Success was defined as an **IOP** between 6 and 21 mm Hg and a 20% reduction in **IOP** from the **second** tube **shunt** procedure. Qualified successes met one of these **two** requirements at the last follow-up visit. Total failures did not meet any of the above criteria, required additional surgical intervention to lower **IOP**, or both. MAIN OUTCOME MEASURES: **Intraocular pressure** control, visual acuity preservation, and complications. RESULTS: At the last follow-up visit, the average percent reduction in **IOP** from

both tube shunt procedures was 42+/-21%. The average percent **IOP** reduction from the **second** tube **shunt** was 33+/-17%. Eleven (50%) patients met the criteria for success, 8 (36.4%) patients were qualified successes, and 3 (13.6%) were failures. The median number of hypotensive agents decreased from two to one. Ten patients experienced new or worse pseudophakic bullous keratopathy after the **second** tube **shunt**, six of whom underwent penetrating keratoplasty. Thirteen (59%) patients maintained visual acuity within one line of their **second** tube **shunt** pre-operative Snellen visual acuity. Seven (32%) patients lost **more than** 2 lines, and one patient lost light perception. CONCLUSIONS: Although corneal morbidity is a common complication, a **second** tube **shunt** does not cause higher-than-expected rates of other complications associated with tube **shunt** surgery. Eyes that undergo a **second** tube **shunt** procedure can achieve pressure control, require fewer hypotensive agents, and may maintain stable visual acuity.

12/7/46 (Item 1 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2009 The Thomson Corporation. All rights reserved.

0019569736 **Biosis No.:** 200700229477

Targeted stent placement and multi-stent therapy

Author: Anonymous; Zhou Jianbo; Smedley Gregory

Author Address: Rancho Santa Margarita, CA USA**USA

Journal: Official Gazette of the United States Patent and Trademark Office Patents MAR 20 2007

2007

Patent Number: US 07192412 Patent Date Granted: March 20, 2007 20070320 Patent Classification: 604-8 Patent Assignee: Glaukos Corporation Patent Country: USA

ISSN: 0098-1133

Document Type: Patent **Record Type:** Abstract **Language:** English

Abstract: A trabecular flow model for producing treatment recommendations for patients with elevated **intraocular pressure** is disclosed. One method includes providing **intraocular pressure** measurements for a patient; providing aqueous cavity information, such as collector channel resistance and Schlemm's canal resistance, and determining a treatment recommendation for the patient based on the aforementioned parameters.

12/7/55 (Item 10 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2009 The Thomson Corporation. All rights reserved.

18557682 **Biosis No.:** 200510252182

Trabecular bypass stents increase outflow facility in cultured human anterior segments

Author: Bahler C K (Reprint); Johnson D H; Smedley G T Author Address: Mayo Coll Med, Rochester, MN USA**USA

Journal: IOVS 45 (Suppl. 2): p U434 APR 2004 2004

Conference/Meeting: Annual Meeting of the Association-for-Research-in-Vision-and-

Ophthalmology Ft Lauderdale, FL, USA April 24 -29, 2004; 20040424

Sponsor: Assoc Res Vis & Ophthalmol

ISSN: 0146-0404

Document Type: Meeting; Meeting Poster

Record Type: Abstract Language: English

Abstract: Purpose: To determine what effect bypassing the trabecular meshwork has on outflow facility in cultured human anterior segments. Methods: Anterior segments from 9 donors (n=16 eyes) were placed in perfusion culture without the ciliary body. After establishment of baseline intraocular pressure, trabecular bypass stents were inserted into the trabecular meshwork with the lumen of the tube opening into Schlemm's canal. Eyes were returned toculture, and intraocular pressure recorded. Eyes received from 1 to 4 stents, placed equidistant apart at 3, 6, 9 or 12 o'clock. In eyes receiving 1 or 2 stents, additional stents were later added to a maximum of 4 per eye. In 3 eyes, trabecular meshworks were excised and differences in intraocular pressure compared, (trabecular meshwork plus stents vs. removal of trabecular meshwork and stents). Control eyes were manipulated in a similar fashion each time a stent was placed in the experimental eye.Results: Facility of outflow increased after stent placement: 1 stent: increase 43% (n=2); 2 stents: increase 57% (p=0.04; n=6); 3 stents: increase 69% (p=0.02; n=4); 4 stents increase 41% (p=0.009; n=9). In two eyes, addition of 3 stents lowered IOP from 17 to 11.5 mmHg and following trabecular meshwork removal, intraocular **pressure** was reduced to 4.5 mmHg. In a third eye, stent placement in each quadrant, lowered intraocular pressure from 17 to 12 mmHg and maintained an intraocular pressure of 12 mmHg following trabecular meshwork removal. Conclusions: Bypass of the trabecular meshwork increases outflow facility in cultured human anterior segments.

12/7/77 (Item 1 from file: 23)

DIALOG(R)File 23: CSA Technology Research Database

(c) 2009 CSA. All rights reserved.

0010572994 IP Accession No: 200811-71-2108236; 200811-61-2211325; 20082050254; A08-99-

2153640

Ocular implants with anchors and methods thereof

Tu. Hosheng; Artof, Jason; Haffner, David

. USA

Publisher Url: http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u =/netaht ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=74 31710.PN.&OS=pn/7431710&RS=PN/7431710

Document Type: Patent **Record Type:** Abstract **Language:** English

File Segment: Metadex; Mechanical & Transportation Engineering Abstracts; ANTE: Abstracts in

New Technologies and Engineering; Aerospace & High Technology

Abstract:

Intraocular stents and applicators are disclosed for treating **glaucoma**. The stents are configured to extend between the anterior chamber of the eye and Schlemm's canal for enhancing outflow of aqueous from the anterior chamber so as to reduce **intraocular pressure**. The stents can have features for anchoring the stent into Schlemm's canal as well as preventing the walls of Schlemm's canal from closing the outlet of the stents. The applicators can be steerable so as to make implantation easier.

Additionally, the applicators can be configured to hold a **plurality** of **stents** so that **multiple stents** can be implanted through one incision without removing the applicator from the incision between serial implantations.

```
File 350: Derwent WPIX 1963-2009/UD=201001
         (c) 2010 Thomson Reuters
  File 347: JAPIO Dec 1976-2009/Sep(Updated 091230)
         (c) 2010 JPO & JAPIO
S1
       12516
              (IO OR INTRAOCULAR )()PRESSURE? ? OR IOP OR GLAUCOMA? ? OR
             (OCULAR OR INTRAOCULAR) () HYPERTENSION
limitall/s1
   6871
               MULTIPLE OR MULTI OR MANY OR NUMEROUS OR PLURALITY OR MORE-
             () THAN OR SEVERAL OR NUMBER OR ADDITIONAL OR TWO OR DUAL OR P-
            AIR OR SECOND OR SECONDARY
s3
         360 STENT? ? OR SHUNT? ?
         760 IMPLANT? ?
S4
         227 (OUTFLOW OR DRAIN? OR DISCHARG? OR FLOW) (2N) (PATH? OR TUBE?
             OR TUBULAR OR SHEATH OR SLEEVE? ?)
S6
        453 S2(S)(S3:S5)
s7
        163 S2(S)S3
        170 S2(10N)(S3:S5)
S8
S 9
        102 S8(S)S1
$10 47 $8(30N)$1
$11 102 $9 OR $10
         47 S8(30N)S1
```

11/25,K/21 (Item 21 from file: 350) DIALOG(R)File 350: Derwent WPIX

(c) 2010 Thomson Reuters. All rights reserved.

0017237730 Drawing available

WPI Acc no: 2008-A58161/200804

Related WPI Acc No: 2001-648840; 2002-519221; 2002-723764; 2003-183958; 2003-219555; 2003-238321; 2003-557632; 2004-169442; 2004-399746; 2004-542410; 2004-561422; 2005-020739; 2005-212375; 2005-416693; 2005-590789; 2005-785725; 2005-810405; 2006-054222; 2006-063724; 2006-065890; 2007-433461; 2007-871979

XRPX Acc No: N2008-045007

Implant e.g. intraocular stent, delivering instrument for treating e.g. glaucoma, has biocompatible implants positioned in body are sized and shaped to convey aqueous humor from anterior chamber of eye to fluid outflow path of eye

Patent Assignee: GLAUKOS CORP (GLAU-N)
Inventor: HAFFNER D: SMEDLEY G T: TUH

| Patent Family (1 patents, 1 countries) | | | | |
|--|------|----------|--------|------|
| Patent Number | Kind | Date | Update | Type |
| US 20070276316 | A1 | 20071129 | 200804 | В |

Local Applications (no., kind, date): US 2002118578 A 20020408; US 2002401166 P 20020805; US 2003451226 P 20030228; US 2003634213 A 20030805; US 2007836112 A 20070808 Priority Applications (no., kind, date): US 2002118578 A 20020408; US 2002401166 P 20020805; US 2003451226 P 20030228; US 2003634213 A 20030805; US 2007836112 A 20070808

Alerting Abstract US A1

NOVELTY - The instrument has an elongate body with a tube sized to be introduced into an eye (10) through an incision in the eye. A trocar in the tube has a cutting edge sufficiently sharp to cut through a wall of a physiologic outflow pathway. A set of biocompatible implants is positioned in the elongate body, where each of the implants is sized and shaped to convey aqueous humor from an anterior chamber (20) of the eye to a fluid outflow path of the eye. The elongate body has an actuator that serially dispenses the implants from the elongate body for implanting in eye tissue. DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. a method of implanting a set of implants for treating glaucoma, comprising inserting an instrument into an eye through an incision

- 2. a method of treating an eye condition, comprising making an incision into a naturally-occurring space of an eye
- 3. a method of treating glaucoma, comprising providing biocompatible implants.

USE - Used for delivering an implant such as Intraocular stent and self-trephining glaucoma stent, for treating an ophthalmic condition e.g. glaucoma, and dispensing the implant through a wall of a physiologic outflow pathway.

ADVANTAGE - The instrument efficiently delivers implants for treating the ophthalmic condition and effectively dispenses implants through a wall of a physiologic outflow pathway. The set of biocompatible implants is positioned in the elongate body, where each of the implants is sized and shaped to convey aqueous humor from an anterior chamber of the eye to a fluid outflow path of the eye, thus reducing elevated intraocular pressure in an animal eye and human eye. The instrument treats glaucoma in faster, safer, less expensive manner, and saves operating time, and reduces redundant incision or injury.

Original Publication Data by AuthorityArgentinaPublication No. ...Original Abstracts:so as to make implantation easier. Additionally, the applicators can be configured to hold a plurality of stents so that multiple stents can be implanted through one incision without removing the applicator from the incision between serial... ...Claims:the eye to a fluid outflow path of the eye so as to reduce elevated intraocular pressure; andsaid elongate body further comprising an actuator that serially dispenses the implants from the...

Dialog eLink: Order File History 11/25,K/22 (Item 22 from file: 350) DIALOG(R)File 350: Derwent WPIX (c) 2010 Thomson Reuters. All rights reserved.

0017157031 *Drawing available* WPI Acc no: 2007-871979/200780

Related WPI Acc No: 2001-648840; 2002-519221; 2002-723764; 2003-183958; 2003-219555; 2003-238321; 2003-557632; 2004-169442; 2004-399746; 2004-542410; 2004-561422; 2005-020739; 2005-212375; 2005-416693; 2005-590789; 2005-785725; 2005-810405; 2006-054222; 2006-063724

065890; 2007-433461; 2008-A58161

XRPX Acc No: N2007-692598

Implant e.g. intraocular stent, implanting method for treating glaucoma, involves providing set

of biocompatible implants that convey aqueous humor from anterior chamber of eye to fluid outflow path of eye

Patent Assignee: GLAUKOS CORP (GLAU-N) Inventor: HAFFNER D: SMEDLEY G T. TU H

| Patent Family (1 patents, 1 countries) | | | | |
|--|------|----------|--------|------|
| Patent Number | Kind | Date | Update | Type |
| US 20070276315 | A1 | 20071129 | 200780 | В |

Local Applications (no., kind, date): US 2002118578 A 20020408; US 2002401166 P 20020805; US 2003451226 P 20030228; US 2003634213 A 20030805; US 2007836106 A 20070808 Priority Applications (no., kind, date): US 2002118578 A 20020408; US 2002401166 P 20020805; US 2003451226 P 20030228; US 2003634213 A 20030805; US 2007836106 A 20070808

Alerting Abstract US A1

NOVELTY - The method involves inserting an instrument into an eye (10) through an incision, and providing a set of biocompatible implants that, when implanted, convey aqueous humor from an anterior chamber (20) of the eye to a fluid outflow path of the eye. The instrument is utilized to deliver a biocompatible implant through a wall of Schemes canal (22) at a location, and the instrument is utilized to deliver another biocompatible implant through a wall of Schemes canal at another location, without removing the instrument from the eye between the deliveries of the implants. DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1. a method of treating an eye condition, comprising making an incision into a naturallyoccurring space of an eye
- 2. a method of treating glaucoma, comprising providing biocompatible implants to convey aqueous humor from an anterior chamber of an eye to a fluid outflow path of the eye.

USE - Used for implanting an implant such as Intraocular stent and self-trephining glaucoma stent, for treating glaucoma.

ADVANTAGE - The method efficiently implants the implant for treating glaucoma. A set of biocompatible implants is provided to convey aqueous humor from an anterior chamber of the eye to a fluid outflow path of the eye, thus reducing elevated intraocular pressure in an animal eye and human eye. The method treats glaucoma in faster, safer, less expensive manner, and saves operating time, and reduces redundant incision or injury.

Original Publication Data by AuthorityArgentinaPublication No. ...Original Abstracts:so as to make implantation easier. Additionally, the applicators can be configured to hold a plurality of stents so that multiple stents can be implanted through one incision without removing the applicator from the incision between serial... Claims: What is claimed is:1. A method of implanting a plurality of implants for treating glaucoma, comprising:inserting an instrument into an eye through an incision; providing a plurality of biocompatible implants that, when implanted, convey aqueous humor from an anterior chamber of the eye to a fluid outflow path of the eye so as to reduce intraocular pressure; utilizing said instrument to deliver a first biocompatible implant through a wall of Schlemm's canal at a first location; andutilizing said instrument to deliver a second biocompatible implant through a wall of Schlemm's canal at a second location, without removing said instrument

from the eye between said deliveries of said implants; wherein...

11/25,K/24 (Item 24 from file: 350) DIALOG(R)File 350: Derwent WPIX

(c) 2010 Thomson Reuters. All rights reserved.

0016739351 Drawing available WPI Acc no: 2007-454420/200744 XRAM Acc no: C2007-165397 XRPX Acc No: N2007-343801

Glaucoma e.g. open-angle glaucoma, treating method, involves acquiring treatment recommendation based on baseline intraocular pressure of patient, where recommendation includes recommended number of stents

Patent Assignee: GLAUKOS CORP (GLAU-N)

Inventor: SMEDLEY G; ZHOU J

| Patent Family (1 patents, 1 countries) | | | | |
|--|------|----------|--------|------|
| Patent Number | Kind | Date | Update | Туре |
| US 7192412 | В1 | 20070320 | 200744 | В |

Local Applications (no., kind, date): US 2002410646 P 20020914; US 2002432861 P 20021212; US 2003438372 P 20030107; US 2003662696 A 20030915

Priority Applications (no., kind, date): US 2002410646 P 20020914; US 2002432861 P 20021212; US 2003438372 P 20030107; US 2003662696 A 20030915

Alerting Abstract US B1

NOVELTY - The method involves acquiring treatment recommendation including a recommended location of a **stent** implantation and a recommended **number** of **stents** for a patient. The recommendation is acquired based on a baseline **intraocular pressure** of the patient, target reduction in **intraocular pressure** for the patient, location of a collector channel and an aqueous cavity datum that is acquired, where the datum is selected from the group of a collector channel resistance e.g. Schlemm's canal resistance. The patient is treated according to the recommendation.

USE - Used for treating a glaucoma e.g. open-angle glaucoma, close-angle glaucoma in the eye of a patient by trabecular bypass microsurgery and viscocanalostomy surgery.

ADVANTAGE - The method allows implanting recommended **number** of **stents** for the patient, thus reducing an elevated **intraocular pressure**, and hence providing treatment of **glaucoma** in a faster, safer and less expensive manner. The method maintains **intraocular pressure** of the eye by the intricate balance of secretion and outflow of the aqueous and enhances aqueous transport or therapeutic effects on the tissue by targeted **stent** placement and **multi-stent** therapy.

DESCRIPTION OF DRAWINGS - The drawing shows a flow diagram illustrating a method for treating **glaucoma**.

11/25,K/60 (Item 60 from file: 350) DIALOG(R)File 350: Derwent WPIX (c) 2010 Thomson Reuters. All rights reserved. 0014697530

WPI Acc no: 2005-045129/200505

XRAM Acc no: C2005-015510 XRPX Acc No: N2005-039346

Method for treating refractory glaucoma

Patent Assignee: MIKROKHIRURGIYA GLAZA SCI TECH COMPLEX (MIKR-R)

Inventor: BORZENOK S A; OVCHINNIKOVA A V; ZUBAREVA L N

| Patent Family (1 patents, 1 countries) | | | | |
|--|------|----------|--------|------|
| Patent Number | Kind | Date | Update | Type |
| RU 2240086 | C2 | 20041120 | 200505 | В |

Local Applications (no., kind, date): RU 2002131786 A 20021127 Priority Applications (no., kind, date): RU 2002131786 A 20021127

Alerting Abstract RU C2

NOVELTY - Treating refractory glaucoma, involves forming and separating a surface scleral fragment; forming, separating and dissecting a deep scleral fragment; introducing drainages out of human amniotic membrane into subconjunctival and subscleral spaces to put one of them under a surface scleral fragment by removing **implant**'s part into anterior chamber. The **second** drainage should be put subconjunctivally above the scleral fragment. **Implants**' edges should be withdrawn beyond the limits of all edges of surface scleral fragment onto adjacent sclera. Moreover, implants should be placed in subscleral and subconjunctival spaces loosely by not trying to separate them and, thus, forming wave-like protrusions at implants' surfaces. The method enables stabilization and regeneration of processes in area of drainage implantation, provide tissue separation by keeping intraocular liquid filtration and creates permeable tamponade of anterior chamber.

USE - Medicine, ophthalmology.

ADVANTAGE - Higher efficiency of therapy.

Alerting Abstract ...and subscleral spaces to put one of them under a surface scleral fragment by removing **implant**'s part into anterior chamber. The **second** drainage should be put subconjunctivally above the scleral fragment. **Implants**' edges should be withdrawn beyond the limits of all edges of surface scleral fragment onto...

11/25,K/64 (Item 64 from file: 350) DIALOG(R)File 350: Derwent WPIX

(c) 2010 Thomson Reuters. All rights reserved.

0014372548 *Drawing available* WPI Acc no: 2004-561422/200454

Related WPI Acc No: 2002-723764; 2003-219555; 2003-557632; 2004-169442; 2004-399746; 2004-542410; 2005-212375; 2005-416693; 2005-785725; 2005-810405; 2006-054222; 2007-433461; 2007-

871979; 2008-A58161

XRAM Acc no: C2004-205056 XRPX Acc No: N2004-444259

Kit for treating glaucoma, comprises a sterile package having one of numerous glaucoma treatment implants and applicators, and numerous implants and a single reloadable applicator for implanting implants in an eye

Patent Assignee: BURNS T W (BURN-I); HAFFNER D (HAFF-I)

Inventor: BURNS T W; HAFFNER D

| | Patent Family (1 patents, 1 countries) | | | | |
|---|--|------|----------|--------|------|
| - | Patent Number | Kind | Date | Update | Type |
| | US 20040147870 | A1 | 20040729 | 200454 | В |

Local Applications (no., kind, date): US 2002118578 A 20020408; US 2002401166 P 20020805; US 2003451226 P 20030228; US 2003634213 A 20030805; US 2003695668 A 20031028 Priority Applications (no., kind, date): US 2002118578 A 20020408; US 2002401166 P 20020805; US 2003451226 P 20030228; US 2003634213 A 20030805; US 2003695668 A 20031028

Alerting Abstract US A1

NOVELTY - A glaucoma treatment kit comprises a sterile package (308) having:

- A. **numerous glaucoma** treatment **implants** and applicators (304) for implanting **numerous implants** in eye; and
- B. **numerous implants** and a single reloadable applicator for implanting the **implants** in eye.

USE - For treating glaucoma.

ADVANTAGE - The kit containing intraocular stents extend between anterior chamber and Schlemm's canal of eye and enhances outflow of aqueous from anterior chamber and reduces intraocular pressure.

11/25,K/68 (Item 68 from file: 350) DIALOG(R)File 350: Derwent WPIX

(c) 2010 Thomson Reuters. All rights reserved.

0014214004 Drawing available

WPI Acc no: 2004-399746/200437

Related WPI Acc No: 2002-519221; 2002-723764; 2003-183958; 2003-219555; 2003-238321; 2003-557632; 2004-169442; 2004-542410; 2004-561422; 2005-020739; 2005-212375; 2005-416693; 2005-590789; 2005-785725; 2005-810405; 2006-054222; 2006-063724; 2006-065890; 2007-433461; 2007-43060; 200

871979; 2008-A58161

XRPX Acc No: N2004-318680

Trabecular stenting device for glaucoma treatment, has inlet portion that provides fluid communication from anterior chamber of eye to outlet portion which is introduced into Schlemm's canal

Patent Assignee: GLAUKOS CORP (GLAU-N); HAFFNER D (HAFF-I); SMEDLEY G T (SMED-

I); TU H (TUHH-I)

Inventor: HAFFNER D; SMEDLEY G T; TU H; SMEDLEY G

| Patent Family (5 patents, 107 countries) | | | | | |
|--|------------|----------|--------|------|--|
| Patent Number | Kind | Date | Update | Туре | |
| US 20040102729 | A 1 | 20040527 | 200437 | В | |
| WO 2005016418 | A1 | 20050224 | 200515 | Е | |
| EP 1651291 | A1 | 20060503 | 200629 | Е | |
| AU 2004264913 | A1 | 20050224 | 200656 | Е | |
| JP 2007501066 | W | 20070125 | 200710 | E | |

Local Applications (no., kind, date): US 2002118578 A 20020408; US 2002401166 P 20020805; US 2003451226 P 20030228; US 2003634213 A 20030805; WO 2004US24988 A 20040803; EP 2004779911 A 20040803; WO 2004US24988 A 20040803; AU 2004264913 A 20040803; WO 2004US24988 A 20040803; JP 2006522665 A 20040803

Priority Applications (no., kind, date): US 2002118578 A 20020408; US 2002401166 P 20020805; US 2003451226 P 20030228; US 2003634213 A 20030805

Alerting Abstract US A1

NOVELTY - An outlet portion is shaped and introduced into the Schlemm's canal (22), with the longitudinal axis of the trabecular stenting device at an angle to the Schlemm's canal. An inlet portion permits communication of fluid from an anterior chamber (20) of the eye (10) to the outlet portion. DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of implanting implants for treating glaucoma.

USE - For glaucoma treatment.

ADVANTAGE - Enables faster, safer and less expensive treatment of glaucoma.

DESCRIPTION OF DRAWINGS - The figure is an enlarged cross-sectional view of an anterior chamber angle of an eye with a trabecular stent.

10 Eye

14 Pupil

20 Anterior chamber

21 Trabecular meshwork

22 Schlemm's canal

Original Publication Data by AuthorityArgentinaPublication No. ...Original Abstracts:so as to make implantation easier. Additionally, the applicators can be configured to hold a plurality of stents so that multiple stents can be implanted through one incision without removing the applicator from the incision between serial... ... so as to make implantation easier. Additionally, the applicators can be configured to hold a plurality of stents so that multiple stents can be implanted through one incision without removing the applicator from the incision between serial... ... so as to make implantation easier. Additionally, the applicators can be configured to hold a plurality of stents so that multiple stents can be implanted through one incision without removing the applicator from the incision between serial...

11/25,K/71 (Item 71 from file: 350) DIALOG(R)File 350: Derwent WPIX (c) 2010 Thomson Reuters. All rights reserved.

0013950984 *Drawing available*WPI Acc no: 2004-131503/200413
XRPX Acc No: N2004-104937

Ocular shunt for treating glaucoma, has tube with porous end plate implanted into subconjunctival-tenon space and connected to other tubes to form cross-shaped double shunt

Patent Assignee: REN D H (REND-I)

Inventor: REN D H

| Patent Family (1 patents, 1 countries) | | | | |
|--|------------|----------|--------|------|
| Patent Number | Kind | Date | Update | Type |
| US 20030236483 | A 1 | 20031225 | 200413 | В |

Local Applications (no., kind, date): US 2002183781 A 20020625 Priority Applications (no., kind, date): US 2002183781 A 20020625

Alerting Abstract US A1

NOVELTY - The shunt has a tube (20) implanted in an anterior chamber (50) with a hole (23) in a center. The tube forms a T-shaped shunt with a tube (30) implanted in a lumen of a Schlemms canal (60), at right angles. A tube (40) with a porous end plate is implanted into a subconjunctival-tenon space and is connected to the tubes (20, 30) to form a cross-shaped double shunt.

USE - Used for draining aqueous fluid in eye for treating glaucoma.

ADVANTAGE - The tube forming a cross-shaped shunt with the other tubes controls the rate of outflow of aqueous humor through the porous end plate, thereby preventing an overflow of too much fluid from the eye and controlling intraocular pressure associated with glaucoma.

Original Titles: Dual drainage ocular shunt for glaucoma Alerting Abstract ...DESCRIPTION OF DRAWINGS - The drawing shows a perspective view of a combined dual shunt in place in the eye... Original Publication Data by Authority Argentina Publication No. ... Original

Abstracts:interconnected with the first tube at a right angle to form a single T-shaped **shunt** with the **second tube** implanted in **the** lumen of Schlemm's Canal. A third tube, with a porous end plate, is implanted into the subconjunctival-tenon space and is connected to the first and **second** tubes to form **the** "cross-shaped" double **shunt**. The end plate **has** small pores that control the rate of aqueous humor outflow. The first T-shaped shunt... ... **Claims:** an eye and capable of receiving a controlled flow of aqueous fluid through the first **tube**, the **flow** being controlled by the size of the membrane **hole**; a **second tube** attached transversely to the first tube, the **second** tube having a second lumen therethrough and two open ends communicating with the second lumen...

11/25,K/89 (Item 89 from file: 350) DIALOG(R)File 350: Derwent WPIX

(c) 2010 Thomson Reuters. All rights reserved.

0006899605 *Drawing available* WPI Acc no: 1994-293369/199436 XRPX Acc No: N1994-230909

Method for reducing intraocular pressure within eye surgically - includes providing tubular

shunt having first and second coaxially and removably connected tubes, and inserting first tube into anterior chamber

Patent Assignee: CAMRAS C B (CAMR-I)

Inventor: CAMRAS C B

| Patent Family (1 patents, 1 countries) | | | |
|--|------|----------|-------------|
| Patent Number | Kind | Date | Update Type |
| US 5346464 | A | 19940913 | 199436 B |

Local Applications (no., kind, date): US 1992848916 A 19920310; US 199348465 A 19930414 Priority Applications (no., kind, date): US 1992848916 A 19920310; US 199348465 A 19930414

Alerting Abstract US A

The method includes the steps of providing a tubular shunt having first and second coaxially and removably connected tubes, having a length to extend from within the anterior chamber to a position of the conjunctival cul-de-sac. The first tube has first and second ends and the second tube having first and second ends, with a filter mounted within the second tube to prevent bacterial ingress. The next step is inserting the first end of the first tube into the anterior chamber, and piercing the conjunctival layer and passing the second end of the first tube outwardly through it to lay externally of the conjunctival layer. The final step is connecting the first end of the second tube to the second end of the first tube such that the second tube lays externally of the conjunctival layer.

ADVANTAGE - Eliminates possibility of scarring of conjunctival Tenon's and/or episcleval tissue over external drainage site.

...includes providing tubular shunt having first and second coaxially and removably connected tubes, and inserting first tube into anterior chamber Original Publication Data by AuthorityArgentinaPublication No. Original Abstracts: An apparatus for reducing intraocular pressure includes first and second resilient flexible tubes connected together to permit fluid flow therethrough. The first tube has one end inserted within the anterior chamber of the eye to drain fluid therefrom... ... end thereof which opens when subjected to a predetermined fluid pressure, to thereby reduce the intraocular pressure of the eye. A filter is mounted within the second tube to prevent bacteria from entering the anterior chamber of the eye, while permitting replacement of the filter as desired. A method for reducing intraocular pressure includes the step of inserting a first end of the first described tube into the anterior chamber of the... ... Claims: the eye and under the eyelids, said procedure including the steps of: providing a tubular shunt having first and second coaxially and removably connected tubes, having a length to extend from within the anterior chamber to a...